

Claims:

1. A process for purifying an impure substance through emulsion crystallisation comprising the steps of
- (a) forming an emulsion of organic liquid droplets in a continuous water phase, which emulsion contains the impure substance;
- (b) super-saturating the emulsion in the substance;
- (c) inducing crystallization of the substance, whereby crystallization takes place in the water phase;
- (d) isolating the crystals of the substance from the emulsion, yielding an emulsion-filtrate;
- (e) dissolving additional impure substance in the emulsion-filtrate; and
- (f) repeating steps (b)-(d) with the emulsion obtained from step (e).
2. A process according to claim 1 wherein crystals are isolated from emulsion in step (d) by centrifuge.
3. A process according to claim 1 or 2 wherein the emulsion is a micro-emulsion.
4. A process according to claim 1 or 2 wherein the emulsion is a macro-emulsion.
5. A process according to any one or more of the preceding claims wherein dissolving of additional impure substance in step (e) is carried out by any one or more of ultrasound, heating and stirring.
6. A process according to any one or more of the preceding claims wherein the crystals isolated in step (d) are washed with water optionally containing surfactant.
7. A process according to claim 6 wherein the washing water is applied to the crystals during centrifuging.
8. A process according to any of the preceding claims wherein crystallisation is induced by seeding with seed crystals of the substance.

9. A process according to any one of claims 1 to 8 wherein dissolving of additional impure substance in step (e) is carried out by stirring.

5 10. A process according to any one of claims 1 to 8 wherein dissolving of additional impure substance in step (e) is carried out by ultrasound and/or heating.

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